## Abstract

Described is a method and system for establishing an authenticated wireless communication (e.g., using Bluetooth technology) between first and second mobile devices. The first device (e.g., a mobile barcode scanner) sends a signal to establish a wireless communication with the second device. The first device includes a data capturing arrangement ("DCA") as an only input device interface with a user thereof. The second device initiates an authentication process by requesting the first device to obtain a PIN code from the user. Once the first device obtains the PIN code from the user via the DCA, a pairing process is performed to compare the PIN code to entries in a database of authorized PIN codes. When the pairing process has been successfully completed, a link key is generated to establish the authenticated wireless communication between the first and second devices.